Monterey Bay National Marine Sanctuary Research Activity Panel Meeting Minutes

Conference Room California Department of Fish and Game 20 Lower Ragsdale Rd, Suite 100 Monterey California

Friday, October 21, 1994 - 0830 to 1200 hrs

Minutes taken and transcribed by:

Aaron King, Monterey Bay NMS - RAP Executive Coordinator

Member Attendees

George Boehlert, NOAA/NMFS/PFEG Greg Cailliet, Moss Landing Marine Labs, RAP Chairman Laura Ehret, Naval Postgraduate School Steve Eittreim, USGS

Chris Harrold, Monterey Bay Aquarium Jim Harvey, Moss Landing Marine Labs

Jili Harvey, Moss Landing Marine Laus

Terry Jackson, Manager, Monterey Bay NMS

Deborah Johnston, CA Dept. of Fish and Game/Monterey Bruce Robison, MBARI

Jan Roletto, GFNMS

Don Potts, UCSC

Bill Schramm, OAR

Rick Starr, Univ. of CA, Sea Grant Advisory Program

Mark Stephenson, CDFG/Marine Pollution Studies Lab

Les Strnad, California Coastal Commission

Members Not Able to Attend:

Andrew DeVogelaere, ESNERR and Foundation Jim Rote, NOAA/OCRM

Gary Sharp, CIRIOS

Dennis Powers, Hopkins Marine Station Cliff Hoskins, Department of the Interior Karen Worchester, Morro Bay Foundation

Guest Attendees:

Jon Cappella, Owner/Operator, Tri-Sharks Charter Service Marci Glazer, CMC Steve Merrill, Surfers' Environmental Alliance Monte Hampton, USGS
Jeff Paduan, Naval Postgraduate School
Ken Parker, NOAA

Sean Van Sommeran, Director, Pelagic Shark Research Foundation

Greg Cailliet, RAP Chair, introduced the meeting.

Quick discussion items:

Introductions - Introductions were made around the table.

Minutes - The draft minutes from the September 16, 1994, meeting were unanimously approved without discussion.

Report on the September SAC Meeting (Cailliet) - The Chair discussed the agenda topics that were discussed at the last SAC meeting, including: enforcement issues, the Water Quality Protection Program, Sanctuary Birthday Celebrations, Sanctuary vessel traffic safety study, ATOC equipment recovery, MBNMS license plates, recognition of the MBNMS as a Sustainable Development Entity by the Federal government, National Sanctuary Program proposed emblem, Jade Cove process for changing existing regulations, MBNMS Interagency Task Force for Santa Cruz, progress on the MBNMS Cooperative Association, Chumming, and the MBNMS Budget. At the next meeting of the SAC, there will be a working lunch to which each of the RAP members are invited.

Fort Ord Assessment (Cailliet) - The Chair announced that the Army's consultant (Harding/Lawson) is conducting a literature search to determine what had previously been conducted offshore by the Army. To date though, nothing has been done to physically examine the offshore area as was suggested by the RAP subcommittee. Laura Ehret suggested some reference sources, and Greg suggested that anyone with such sources contact Harding/Lawson.

McArthur Ship Time (Cailliet) - The Chair announced that Terry was able to acquire some ship time, and that the RAP was being asked to review possible projects that would optimize the ship's resources. Steve Eittreim announced that he had put in for 30 days of ship time aboard the McArthur for USGS work, and whether any of this MBNMS time was part of the time that he had requested. Aaron said he would try and clear this up. There was some discussion of about how the RAP and the MBNMS should go about soliciting and reviewing potential projects (i.e. - should it be formal or informal).

Aaron was asked to discuss this with Terry, and to put together an RFP if it was determined that the solicitation and review should be formal.

OSPREE Report (King) - Aaron noted for Andrew DeVogelaere that he had incorporated all the comments that had been submitted and sent the review package on to the NSF.

Permit Report (King) - Aaron stated that as long as the RAP meets each Friday before a SAC meeting, that he would probably be able to have a new permit report ready for the RAP to review each meeting (since the SAC wished that the Permit Report be ready one week before its meeting). Aaron also discussed several projects that were on the report, including: ATOC equipment and waste water treatment monitoring programs. Present and future regulation by the MBNMS of fireworks displays was discussed. Aaron described what was being discussed as potential future policies (for example, where, what and when fireworks should be allowed), and where the process now stood. Laura Ehret suggested that the permit report should indicate when the activity is taking place.

Econet Update (King) - Aaron announced that he would be sending things out via an e-mail distribution list from now on instead of faxing many things. Aaron encouraged everyone to have people from their respective institutions send him their e-mail addresses if they wanted to be included on the RAP mailing list as cc's. Aaron discussed briefly how the RAP was slowly moving away from the need for an Econet Bulletin Board, and how he is working on locating a Internet Node that he could use to set up a MBNMS Research Bulletin Board system that people could use regardless of their Internet mail supplier.

Institutional Permits (King) - Nothing new to report. Aaron stated that this was in the lap of Sanctuaries HQ, since it would have ramifications far beyond MBNMS. Aaron stated that he had not heard anything more on this from HQ, but that other priorities have probably caused the creation of a institutional permitting system to be placed on a back burner.

RAP Binder (King) - Aaron will be taking the SAC binder when it is finished and altering it to be a RAP binder.

Research Directory (King) - Aaron stated that he and Jan were discussing the idea of making this a joint GFNMS/CBNMS/MBNMS research directory, and would be discussing this with their managers and HQ. He also stated that a concern had been raised as to the administrative procedure that would be involved in using Congressman

Farr's original directory as a template and basis from which to launch an updated version. Aaron said he would be investigating this.

Research Proposals (King) - Aaron stated that everyone should have received letters on two research proposals that the RAP had "endorsed"; as per the procedure outline in the last meeting, the Yoklavich/Starr proposal and the Youngbluth/Robison proposal. Aaron also stated that the Laural Fox, et al. proposal on creation of a Regional Research Program had not yet been reviewed. Bill Schramm said he would review this one.

Misc. Issues:

- Jan Roletto asked if the RAP would be notified automatically when the ATOC EIS was out. Aaron said he would make it a point to do so, and to make available copies to any member of the RAP who wanted one.

Rick Starr said that he, Mary Yoklavich and Greg Cailliet would be getting together that afternoon to discuss the upcoming Research Symposium, and would update the RAP at the next meeting.

- Bill Schramm briefed the RAP on where NOAA stood with respect to making necessary personnel cuts. One sidelight to these cuts were the possibility of new research funds becoming available as these personnel cuts progressed. He said he would try to find out more and keep the RAP informed.
- Greg Cailliet noted for Jim Rote that a Central California Coast Biosphere Research conference was being planned for March 3-5, 1995, but no attempts had been made to include the MBNMS (or its panels) in this. Jan Roletto said that this was a UN sponsored event and that she would carry this concern of Jim's and Greg's back to people that she knew on the planning board of this conference.
- Greg Cailliet mentioned an invitation that he had just received regarding a National Marine Sanctuaries User Profile Workshop in Monterey December 14 thru 17, 1995. Greg stated that he was confused as to what his role in this should be: Was he being invited as the Chair of the RAP or as a representative of MLML? Greg also was critical of the disorganized nature of the meeting and the short lead-time he was given.
- Jan Roletto announced a seabird workshop that was being sponsored by the GFNMS/CBNMS and held in San Francisco on December 12, and that if anyone wished to be invited to see her.
- Jan Roletto also announced that in 1995 the National Biological Survey will begin at-sea surveys of marbled murrlets between Santa Cruz and Half Moon Bay.
- Terry Jackson said that the proposed 1995 MBNMS Research Budget was holding steady at \$80,000.
- Terry Jackson stated that the Research Coordinator Position has cleared SRD and is at the next level. From there it will go to personnel. Terry stated that he believed it had remained similar to what the RAP had reviewed at the last meeting. Les Strnad suggested that a SAC letter be sent to encourage this position along. Terry asked that he be allowed to pursue this.

BREAK

DISCUSSION ITEMS

CODR (Jeff Paduan) - A network of HF radars is being operated in Monterey Bay for the purposes of evaluating this remote sensing technique and obtaining a description of two-dimensional surface current patterns. The radars measure very near surface currents within the upper 1 m of the water column. Horizontal resolution is 2-4 m. Temporal resolution and offshore range are 1 to 3 hours and 30 to 60 m, respectively, depending on the radar model. Two older NOAA CODARs (coastal HF radars) began operating in 1992 over Monterey Bay. One unit was placed at Hopkins Marine Station at the southern end of Monterey Bay and the other unit was placed at the MBARI operations facility in

Moss Landing, half way around the Bay to the north. This configuration produced continuous data sets of surface currents over periods of several months.

Recently, the HF radar network was augmented when the Naval Postgraduate School replaced the older CODAR in Monterey with a newer-generation SeaSonde system housed in a U.S. Coast Guard facility at Pt Pinos and NOAA installed a SeaSonde system at Long Marine Laboratory in Santa Cruz at the northern end of the Bay. (A third SeaSonde system has been installed by Stanford University at the Granite Canyon Marine Laboratory south of Monterey Bay. Data from this system has not yet been combined with those around the Bay.) With this expanded and upgraded network, coverage of the Bay is complete and observations are returned from offshore regions up to 80 km from Moss Landing. The twodimensional surface current fields generated by these instruments are providing a unique opportunity to study the space and time variability of coastal currents in a region of complex atmospheric forcing and bottom topography that covers a large portion of the Monterey Bay National Marine Sanctuary. Extensive analysis of the remotely-sensed surface currents from the CODAR units--and comparisons with moored and drifting buoy observations--have proved the validity of the measurements, particularly for averages formed over many current maps or for energetic processes such as tides. Less confidence is given to individual current maps due to both known and unknown sources of noise to the radar algorithms.

Radar-derived surface current patterns were presented for periods from semidiurnal to monthly. The lower frequency currents show a persistent cyclonic gyre within Monterey Bay with southward flow and evidence of a recurring eddy offshore of the Bay. The most energetic current patterns within the Bay are, however, fluctuating currents at the diurnal and semidiurnal periods. It was shown that the diurnal-period variations are a result of strong seabreeze forcing. Currents are driven onshore in the late afternoon by strong winds that flow into the Salinas Valley. Semidiurnal current fluctuations are dominated by tidal processes.

The radar-derived surface currents were resolved into their dominant tidal constituents and tidal ellipses were plotted for the M2 (semidiurnal) fluctuations in areas of nearly continuous radar coverage. The major axes of the M2 ellipses align surprisingly well with bottom topography contours along the walls of the Monterey Submarine Canyon. The M2 surface current flows onshore along the topography toward the head of the canyon as the sea level falls, and offshore as it rises. This is contrary to expectations but consistent with historical measurements and with the notion of a strong internal tidal wave propagating along the bottom of the canyon and breaking or reflecting in the shallow water near the head of the canyon.

Continued collection and analysis of multi-site radar data and local environmental data will help identify and correct sources of noise to the radar algorithms and bring these systems closer to the real-time applicability needed for operational tasks such as hazardous spill response or search and rescue operations. To this end, the Monterey Bay HF Radar Consortium has been set up to promote the coordinated use of these instruments in the Monterey Bay area. The Monterey Bay National Marine Sanctuary will be an important participant in, and beneficiary of, this process.

Chumming Subcommittee Report (Johnston) - The Chair decided that the Chumming subcommittee draft report would be kept internal amongst the RAP for now until it is finalized. Before beginning her summary of the draft, Deborah asked that all comments be directed to her or Aaron. Deborah then began a verbal summary, section by section, of the draft report (for a full briefing, see the draft report). The draft report was made up of several components: legal definitions, a scientific literature search, and conversations with recognized experts. After Deborah completed her summary, and fielded several questions, the RAP made the following initial recommendations for the final report:

- 1) Rick Starr noted several places where "facts" were stated, but not documented. He suggested that all "facts" be referenced.
- 2) Laura Ehret suggested that a short discussion of the frequency of chumming in an area be analyzed for its potential to create behavioral alterations in fish.
- 3) Les Strnad suggested that an analysis be run of the potential to create separate areas within the Sanctuary for uses

that may be in conflict, such as in this case, chumming and surfing.

- 4) Bruce Robison suggested that the literature be searched to determine whether any conclusions could be drawn from analysis surrounding partyboats and fish packing houses where inadvertent chumming occurs as a byprocess of their operations. Don Potts suggested that another source of info might be observations surrounding garbage scows.
- 5) Greg Cailliet suggested (with precautions) that the International Shark Attack File headquartered in Gainesville, Florida, may be a source of info.
- 6) Greg Cailliet suggested that the California White Shark Law be fully referenced in this report.

The Chair requested comments on the discussion from any members of the public that were present. Sean Van Sommeran, Steve Merrill, Jon Cappella and Marci Glazer each made statements.

Finally, Les Strnad wanted the Chair to make sure the SAC recognized the amount of work that this and similar tasks entailed, and that this issue be completed by the next meeting.

OTHER ITEMS

Other Old Business - None

New Business -

- Sean Van Sommeran passed out for review by the RAP membership a draft Charter for the Pelagic Shark Research Foundation, and asked everyone to please send him their comments.
- A discussion of the next six month schedule for the RAP meetings was discussed and tabled until the next meeting.
- A decision was made to meet at 1:00 pm for the next meeting in November.

Items for future meetings -

- EPA EMAP by Robert Hall at November meeting
- Monterey Academy of Oceanography

ADJOURN